

AMENDMENTS TO THE CLAIMS

In the claims:

This Listing of Claims replaces all prior versions, and listings, of the claims in this application.

1. (Currently Amended) An apparatus comprising:
a housing;
a grip coupled to the housing; ~~and~~
a binocular digital display assembly coupled to the housing and rotatable about the housing between a plurality of angular positions which can be mechanically maintained during use; and
wherein the display assembly has a stowed orientation and a deployed orientation and wherein when in the stowed orientation, at least 25% of a deployed volume of the display assembly overlaps with a volume of the grip.
2. (Original) The apparatus of Claim 1 wherein the binocular display assembly comprises:
a first lens;
a first display element disposed to be a focal distance from the first lens when the display assembly is in a deployed orientation;
a second lens; and
a second display element disposed to be a focal distance from the second lens when the display is in a deployed orientation.
3. (Original) The apparatus of Claim 2 wherein the display elements are one of liquid crystal displays (LCDs), organic light emitting diode (OLED) displays, Liquid Crystal On Silicon (LCOS) displays, electroluminescent (EL) displays, and retinal scan lasers.

4. (Cancelled)
5. (Currently Amended) The apparatus of Claim 4~~1~~ further comprising:
a self powered expander which when actuated expands the display assembly from its stowed volume to its deployed volume.
6. (Currently Amended) The apparatus of Claim 4~~1~~ further comprising:
self powered positioner which when actuated transitions the display assembly from its stowed orientation to its deployed orientation.
7. (Previously presented) The apparatus of Claim 1 further comprising:
a lens assembly within the housing; and
an image sensing array (ISA) optically coupled to the lens assembly.
8. (Original) The apparatus of Claim 7 further comprising:
a sensor to detect a position of the display assembly relative to the ISA and cause an adjustment to an image displayed on the display assembly based on the position to maintain a consistent orientation of a target on the display.
9. (Original) The apparatus of Claim 1 further comprising:
a distributed network interface coupled to the display assembly.
10. (Original) The apparatus of Claim 7 wherein the binocular display assembly comprises:
a photographic light source.
11. (Original) The apparatus of Claim 7 wherein the binocular display assembly comprises:
a photographic light source positioned sufficiently far from the lens assembly to reduce illumination errors.

12. (Original) The apparatus of Claim 7 further comprising:
a trigger to cause a capture by the ISA, the trigger disposed on the grip to allow actuation by an index finger of a hand holding the grip.
13. (Original) The apparatus of Claim 12 wherein any actuation of the trigger causes a capture.
14. (Original) The apparatus of Claim 1 further comprising:
a pointer button coupled to the grip to provide an interface for user manipulation of a pointer within the display.
15. (Original) The apparatus of claim 14 wherein the pointer button is disposed to allow actuation by the thumb of a hand holding the grip.
16. (Previously Presented) The apparatus of Claim 14 wherein the pointer button is only accessible when the grip is in a deployed orientation.
17. (Original) The apparatus of Claim 14 wherein the pointer button resides within a region and wherein a position of the pointer button within the region is absolutely mapped to the display.
18. (Previously Presented) The apparatus of Claim 14 wherein the trigger and the pointer button provide access to substantially all user controls without the need for other buttons.
19. (Original) The apparatus of Claim 1 wherein the apparatus defines a plurality of memory card slots.

20. (Original) The apparatus of Claim 7 further comprising:
a plurality of memory card interfaces to permit a plurality of memory cards to be concurrently attached and electronically selected by the apparatus.
21. (Original) The apparatus of Claim 1 wherein at least a first position is suitable for right handed use and at least a second position is suitable for left-handed use.
22. (Original) The apparatus of Claim 1 wherein in the deployed orientation, the grip may pivot to at least one self maintaining position on an axis orthogonal to an axis of rotation of the display assembly.
23. (Currently Amended) ~~The~~ An apparatus of Claim 1 further comprises:
_____ a housing;
_____ a grip coupled to the housing; and
_____ a binocular digital display assembly coupled to the housing and rotatable about the housing between a plurality of angular positions which can be mechanically maintained during use;
a visor coupled to the housing and to rest upon a forehead of the user when held by a user for use, the visor having a cross-dimension selected to maintain a predetermined focal distance between the first lens and an eye of the user, the visor pivots coupled to the display assembly to pivot between an open and a closed position wherein pivoting the visor to the open position activates the display; and
_____ a timer that times out after a predetermined time during which no display event occurred, the time out causing the display to deactivate wherein cycling the visor activates the display.
24. (Cancelled)

25. (Original) The apparatus of Claim 23 wherein when the visor is in the closed position, the display is in an inactive state.

26. (Original) The apparatus of Claim 23 wherein the visor protects a lens of the display assembly when in the closed position.

27. (Cancelled)

28. (Currently Amended) An apparatus comprising:

a housing;

a handle coupled to the housing having a stowed orientation and a deployed orientation; and

a digital display assembly coupled to the housing, having a stowed orientation and a deployed orientation, such that, in the deployed orientation, the display is laterally displaced relative to the handle such that, in use, a hand holding the handle is laterally displaced relative to a frontal face of a head of a user, the handle and digital display assembly forming any one of an obtuse or an acute angle with the handle extending downward from the digital display assembly, and the digital display assembly extending across an eye of the user wherein in the stowed orientation at least 25% of a deployed volume of the display assembly overlaps with a volume of the handle.

29. (Cancelled)

30. (Previously Presented) The apparatus of Claim 28 further comprising:

a pointer button coupled to the handle to provide an interface for user manipulation of a pointer on the display, wherein, the pointer button is only accessible when the handle is in the deployed orientation.

31. (Original) The apparatus of Claim 28 further comprising:
a sensor to detect relative rotation of the display assembly and to signal the display to adjust an image on the display to maintain a consistent orientation of an image displayed.
32. (Original) The apparatus of Claim 28 further comprising:
a self powered expander which when actuated expands the display assembly from its stowed volume to its deployed volume.
33. (Original) The apparatus of Claim 28 further comprising:
a self powered positioner which when actuated transitions the display assembly from its stowed orientation to its deployed orientation.
34. (Previously Presented) The apparatus of Claim 28 further comprising:
a lens assembly coupled to the handle; and
an image sensing array (ISA) optically coupled to the lens assembly.
35. (Original) The apparatus of Claim 34 further comprising:
a sensor to detect a position of the display assembly relative to the ISA and cause an adjustment to an image displayed on the display assembly based on the position to maintain a consistent orientation of a target on the display.
36. (Original) The apparatus of Claim 28 further comprising:
a distributed network interface coupled to the display assembly.
37. (Original) The apparatus of Claim 36 further comprising:
a photographic light source.

38. (Original) The apparatus of Claim 36 further comprising:
a photographic light source positioned sufficiently far from the lens assembly to reduce illumination errors.
39. (Previously Presented) The apparatus of Claim 36 further comprising:
a trigger to cause a capture by the ISA, the trigger disposed on the handle to allow actuation by an index finger of a hand holding the handle.
40. (Previously Presented) The apparatus of Claim 28 wherein in the deployed orientation, the handle may pivot to at least one self maintaining position on an axis orthogonal to an axis of rotation of the display assembly.
41. (Previously Presented) The apparatus of Claim 31 wherein in the deployed orientation, the handle defines a first acute angle away from a body of an operator to permit comfort and reduce stress on the hand and arm.
42. (Original) The apparatus of Claim 41 wherein any actuation of the trigger causes a capture.
43. (Original) The apparatus of Claim 28 wherein the pointer button resides within a region and wherein a position of the pointer button within the region is absolutely mapped to the display.
44. (Original) The apparatus of Claim 28 wherein the trigger and the pointer button provide access to substantially all user controls without the need for other buttons.
45. (Original) The apparatus of Claim 28 wherein apparatus defines a plurality of memory card slots.

46. (Original) The apparatus of Claim 36 further comprising:

a plurality of memory card interfaces to permit a plurality of memory cards to be concurrently attached and electronically selected by the apparatus.

47. (Currently Amended) ~~The~~ An apparatus of Claim 28 further comprising:

a housing;

a handle coupled to the housing having a stowed orientation and a deployed orientation;

a digital display assembly coupled to the housing, having a stowed orientation and a deployed orientation, such that, in the deployed orientation, the display is laterally displaced relative to the handle such that, in use, a hand holding the handle is laterally displaced relative to a frontal face of a head of a user, the handle and digital display assembly forming any one of an obtuse or an acute angle with the handle extending downward from the digital display assembly, and the digital display assembly extending across an eye of the user wherein in the stowed orientation at least 25% of a deployed volume of the display assembly overlaps with a volume of the handle;

a visor coupled to the housing and to rest upon a forehead of the user when held by a user for use, the visor having a cross-dimension selected to maintain a predetermined focal distance between the first lens and an eye of the user, the visor pivots coupled to the display assembly to pivot between an open and a closed position wherein pivoting the visor to the open position activates the display;

a timer that times out after a predetermined time during which no display event occurred, the time out causing the display to deactivate; and

wherein cycling the visor activates the display.

48. (Cancelled)

49. (Original) The apparatus of Claim 47 wherein when the visor is in the closed position, the display is in an inactive state.

50. (Original) The apparatus of Claim 47 wherein the visor protects a lens of the display assembly when in the closed position.

51-73. (Cancelled)